



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,191	03/27/2000	Robert J. Donaghey	99-412	4645

28120 7590 08/07/2007
FISH & NEAVE IP GROUP
ROPES & GRAY LLP
ONE INTERNATIONAL PLACE
BOSTON, MA 02110-2624

EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

08/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/536,191

Applicant(s)

DONAGHEY, ROBERT J.

Examiner

PHUC H. TRAN

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 36-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 14-31 and 36-43 is/are rejected.
- 7) ☒ Claim(s) 6 and 8-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1-5, 7, 14-24, 26-31, and 36-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Fischer (U.S. Patent No. 5371734).

- With respect to claims 1, 20, 21, 36-40, and 42-43, Fischer teaches a network (e.g. Fig. 1) comprising: a hub device configured to generate a token and broadcast the token on the network (e.g. the hub 64 in Fig. 1 generate an information the remotes 66 see col. 5, lines 42-50); and at least one peripheral device, which comprises: a memory that stores instructions (e.g. ROM and RAM in Fig. 4); and a processor that executes the instructions in the memory to receive a token from the hub device that identifies the peripheral device (e.g. the microcontroller in Fig. 4), configured to receive the token broadcast by the hub device (e.g. the hub broadcast the

information to remote col. 11, lines 58-59), determine whether the token identifies the peripheral device (see col. 11, lines 67-68 and col. 12, line 1), analyze the token to determine a size and direction of a current data transfer when the token identifies the peripheral device (e.g. the remotes request for TXOPS to the hub 64, the hub permit remotes the TXOP that consider as the size and the direction from remote to hub), and transfer data to or receive data from the hub device according to the determined size and direction of the current data transfer (e.g. the remotes transmit and receive using the TXOPS).

- With respect to claims 2 and 22, Fischer also teaches a single wireless communication channel having a plurality of logical unidirectional communication streams, the data transfer occurring over one of the communication streams (e.g. Fischer teaches a wireless network as in Fig. 1 and the unidirectional as from remotes to the hub and hub to remotes).

- With respect to claims 3, 7 and 23, Fischer discloses a token includes: an address of one of the hub device and the peripheral device (e.g. block 204 in Fig. 11), and stream number that identifies one of the communications streams (e.g. block 202 in Fig. 11).

- With respect to claim 4, Fischer teaches wherein each of communications streams has predetermine size and direction of a data transfer (e.g. Fig. 6-9 shows the size and destination of data)

- With respect to claim 5, Fischer teaches wherein the network operates according to a communications protocol shared by the hub device and the peripheral device to synchronize timing of communications (see col. 15, lines 18-20, lines 39-43).

- With respect to claims 14-17 and 26-29 Fischer discloses wherein at least one of the hub device and the peripheral device is further configured to transfer data in multiple forms (e.g. analog and digital discloses in Fischer's invention).

- With respect to claims 18 and 30, Fischer teaches wherein the hub device is further configured to schedule transmission of a status block from the peripheral device (e.g. the time interval from hub to remotes as show in Fig. 3).

- With respect to claims 19, and 30-31, Fischer further teaches wherein the hub device is further configured to schedule transmission of data from the peripheral device when the status block from the peripheral device indicates that the peripheral device has data ready for transmission to the hub device (e.g. the interval between the hub and remotes in Fig. 3 shows the inbound and outbound).

- With respect to claim 23, Fischer teaches wherein the generating a token includes: accessing a data block in the hub device to identify an address and a communication stream for the current data transfer, and generating the token based on the identified address and communication stream (e.g. Fig. 10-14).

- With respect to claims 24, and 39, Fischer discloses wherein the determining includes: decoding the token to identify the address and the communication stream (e.g. Fig. 10 and 11 shows the information send from the hub, see col. 17, lines 52-60), and analyzing the identified address to determine whether the identified address matches an address of the peripheral device (e.g. address in Fig. 9).

- With respect to claim 41, Fischer teaches a communications protocol used in a network connecting a hub device to at least one peripheral device (e.g. shows in Fig. 2 the hub is 64 and

remotes are 66), the communications protocol having a plurality of frames comprising: a beacon that marks a start of one of the frames (e.g. 160 in Fig. 8); at least one token transmission that identifies one of the peripheral devices for a data transfer (e.g. block 202 in Fig. 11); and at least one data transfer opportunity that permits the hub device to communicate a data block with the identified peripheral device (e.g. the frame TXOP).

Allowable Subject Matter

3. Claims 6, and 8-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments with respect to claims 1-5, 7, 14-24, 26-31, and 36-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sakai et al. (U.S. Patent No. 6005869) discloses communication network.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
8/6/07


CHI PHAM
SUPERVISORY PATENT EXAMINER 8/6/07